

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of claims in the application:

Listing of Claims:

1. (Currently amended) A method for detecting an unbound form of a first member of a binding pair, ~~the binding pair comprising a first and second member, each member bindable to the other,~~ the method comprising the steps of:

- (a) providing a first particle bound to ~~the~~ a second member;
- (b) reacting the first particle bound to the second member with a sample, wherein the second member binds to the unbound form of the first member in the sample thereby forming a first complex ~~between~~ comprising the second member bound to the first particle and ~~unbound~~ the first member ~~present in said sample~~;
- (c) providing into the sample a second particle bound to a third member, the third member being different from the second member and being capable of binding to the first member;
- (d) ~~reacting the second particle bound to the third member with the sample,~~ forming a second complex comprising the third member bound to the first member in the first complex thereby forming and the first particle agglutinated to the second particle ~~a second complex between the third member bound to the second particle and the first complex; and~~
- (e) ~~detecting any second complex formed by determining turbidity or agglutination~~ the agglutinated first and second particles of the second complex by measuring an increase of the turbidity of the sample thereby detecting the unbound form of the first member in the sample.

2. (Original) The method of claim 1, wherein the third member is an antibody which specifically binds to the first member.
3. (Previously presented) The method of claim 1, wherein at least one of the first and second particle comprises latex.
4. (Cancelled)
5. (Original) The method of claim 1, wherein steps (a) through (d) are performed sequentially.
6. (Original) The method of claim 1, wherein steps (a) through (d) are performed simultaneously.
7. (Currently amended) The method of claim 1, wherein the amount of the agglutinated first and second particles ~~second complex formed~~ is quantitated.
8. (Currently amended) The method of claim 1, wherein the first member ~~is~~ comprises protein S.
9. (Currently amended) The method of claim 1, wherein the second member ~~is~~ comprises C4b-binding protein (C4BP) or a fragment thereof.
10. (Original). The method of claim 1, wherein the sample is selected from the group consisting of blood, plasma, serum, saliva, CSF, urine, culture media, a cell suspension, a buffer and an artificially prepared fluid containing the first member.
11. (Original) The method of claim 1, wherein the second member binds to the first member at a single binding site.
12. (Original) The method of claim 11, wherein the third member binds to the first member at a single binding site which is different from the single binding site to which the second member binds.

13. (Original) The method of claim 1, wherein step (b) is performed within 0 to about 180 seconds.

14. (Previously presented) The method of claim 1, wherein the third member and the second member are in a molar ratio of between about 2 and 20.

15. (Previously presented) The method of claim 1, wherein the third member and the second member are in a molar ratio of between about 5 and 10.

16. (Previously presented) The method of claim 1, wherein the third member is present in an amount that is higher than an amount of the free first member in the sample.

17. (Previously presented) The method of claim 1, wherein the third member and the free first member in the sample are in a molar ration of between about 10 and 40.

18. (Currently amended) A composition or a kit for detecting an unbound form of a first member of a binding pair in a sample, the binding pair comprising a the first member and a second member, ~~each member bindable to the other~~, the composition or the kit comprising:

a first particle bound to the second member;

a second particle bound to a third member, the third member being different from the second member and capable of binding to the first member at a binding site different from the second member, wherein the first member comprises protein S and the second member comprises C4BP or a fragment thereof; and

wherein the first and the second particles, when agglutinated, are capable of causing an increase of the turbidity of the sample.

19. (Cancelled)

20. (Currently amended) The composition or the kit of claim 18, wherein the third member is an antibody and the second member is not an antibody.

21. (Currently amended) The composition or the kit of claim 18, wherein the second member comprises a single binding site for the first member.

22. (Currently amended) The composition or the kit of claim 21, wherein the third member binds to the first member at a single binding site which is different from the single binding site to which the second member binds.

23–31. (Cancelled)

32. (Currently amended) A method for diagnosing thrombophilia comprising performing the method of claim 8, and further comprising comparing the amount of the agglutinated first and second particles ~~second complex formed~~ to the amount of the agglutinated first and second particles ~~second complex formed~~ in a sample derived from an individual without thrombophilia.

33. (Cancelled)

34. (New) The composition of claim 18, wherein the size of the first particle and the second particle ranges from about 50 nm to about 1000 nm.

35. (New) The composition of claim 18, wherein the size of the first particle and the second particle are different.